

ABSTRACT OF THE DISCLOSURE

A dielectric recording / reproducing head is provided with: a probe; a return electrode for returning a high-frequency component
5 of an electric field applied from the probe; and bias electrodes, which are placed under the return electrode. By applying a voltage stronger than a coercive electric field between the probe and each of the bias electrodes, polarization domains are formed which have polarization directions parallel to a surface of a dielectric recording
10 medium. The polarization directions are determined by selecting the bias electrode to which the voltage is applied, and four types of data are recorded on a predetermined site of the dielectric recording medium, which allows multivalued recording. Moreover, the polarization directions of the polarization domains are detected by an
15 electric field which is formed by applying a voltage between the bias electrodes and which is parallel to the surface of the dielectric recording medium, causing data to be read out.